TOE2h0" thBEE260

COMMERCE GENERAL ARCHITECTURE

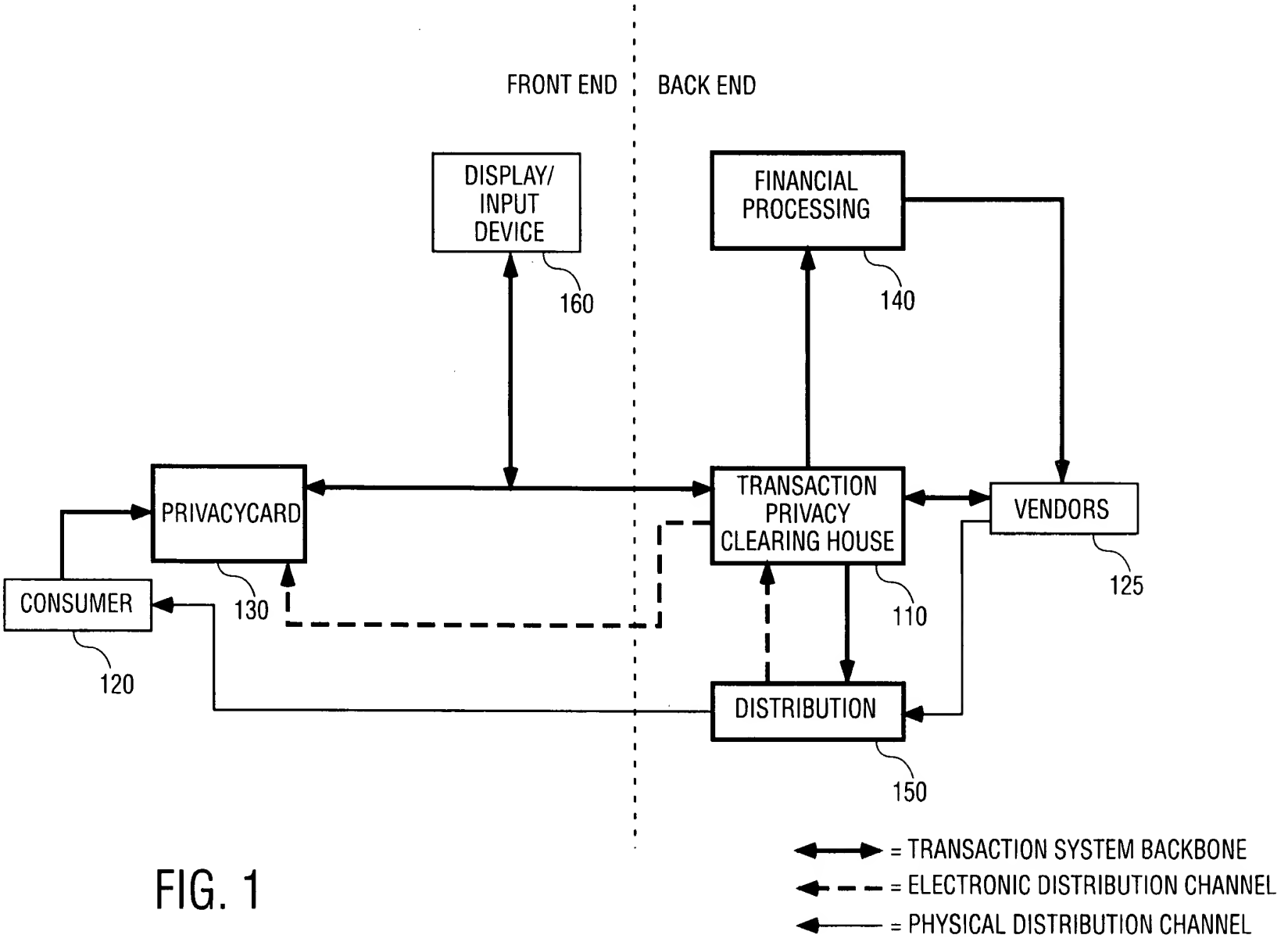


FIG. 1

TOE2h0" thBE260

COMMERCE GENERAL ARCHITECTURE - POS TERMINAL:

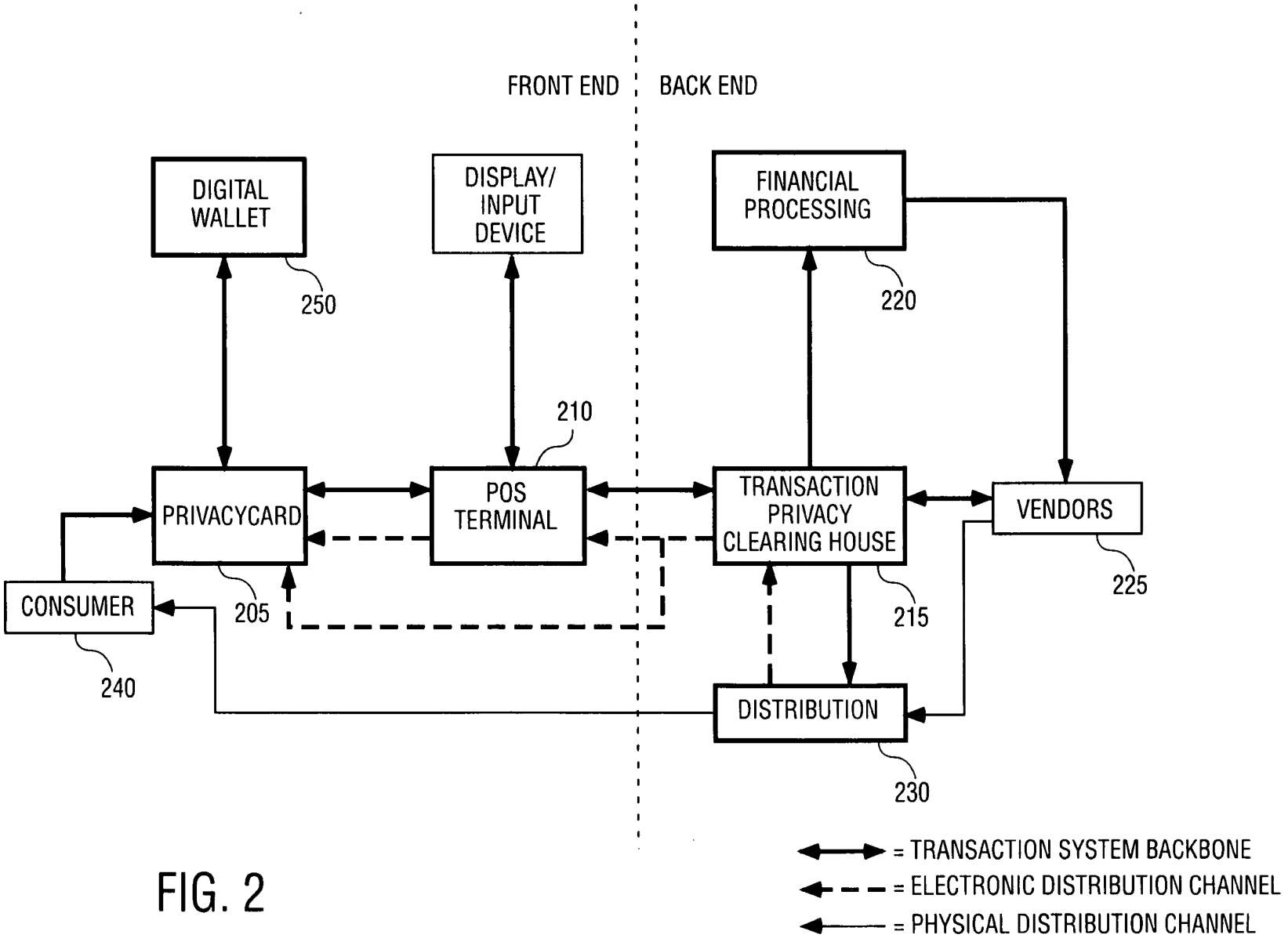


FIG. 2

TOE2hO" th9EE260

COMMERCE IN-HOME ENVIRONMENT

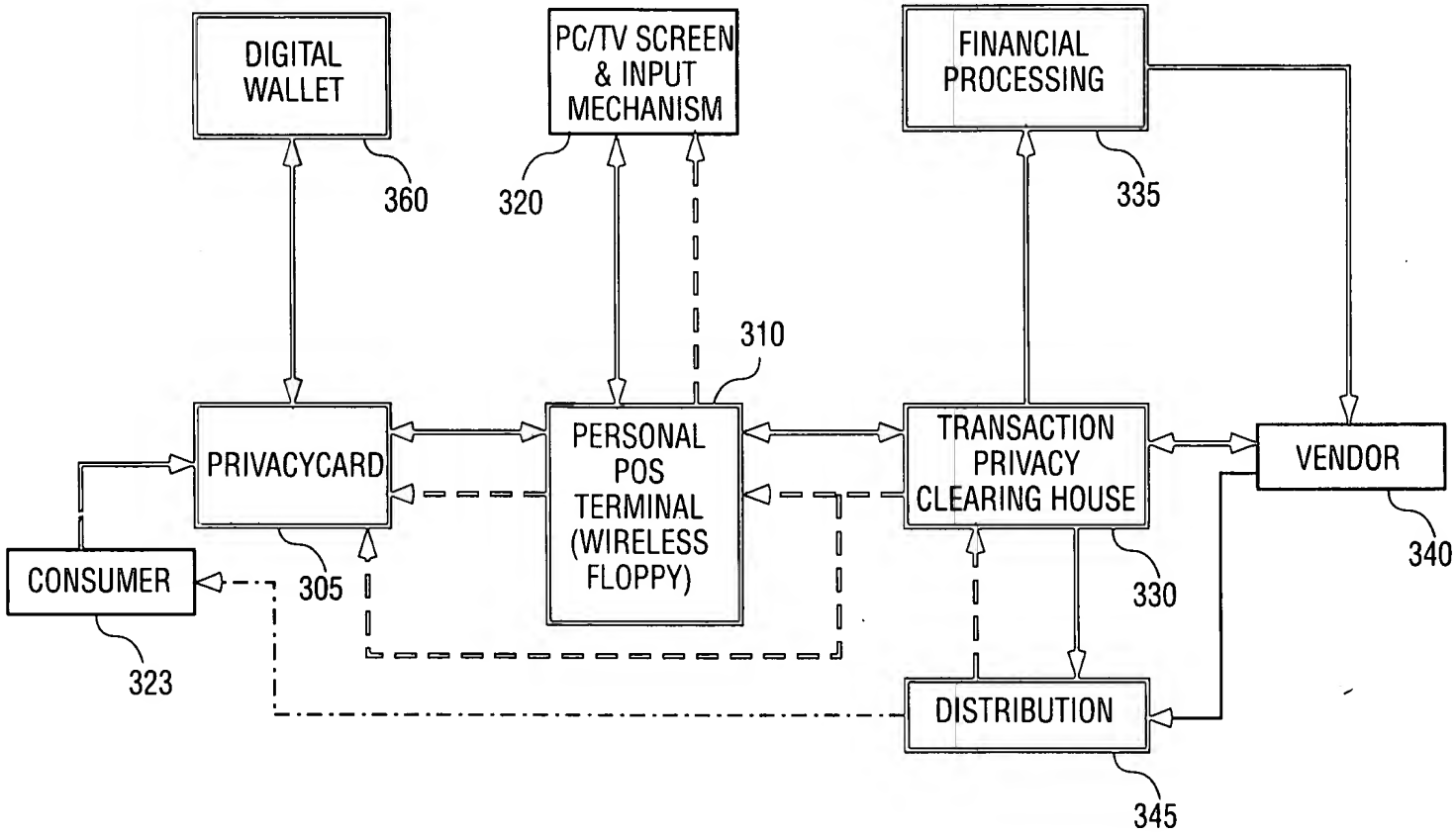


FIG. 3

TOE2h0"th8652b0

IN-STORE RETAIL ENVIRONMENT

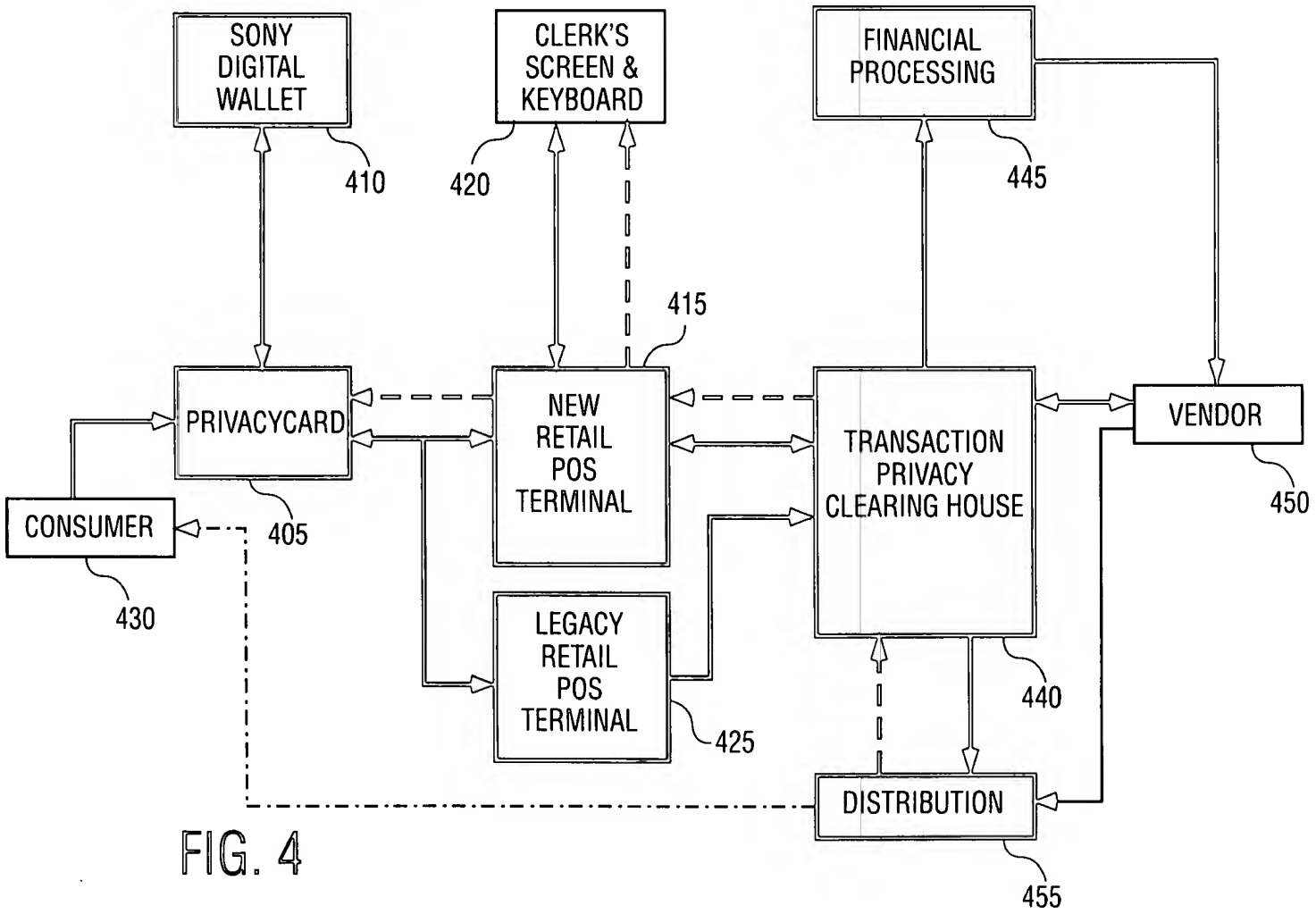
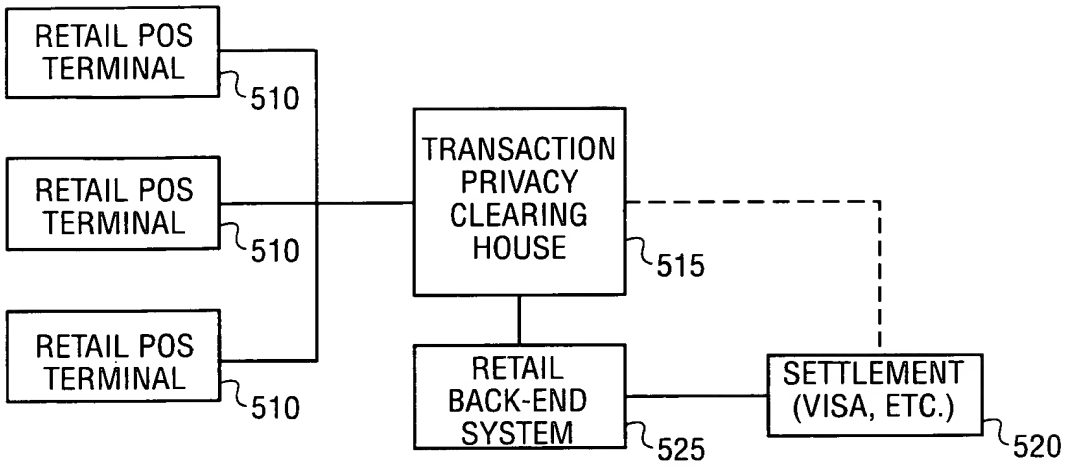
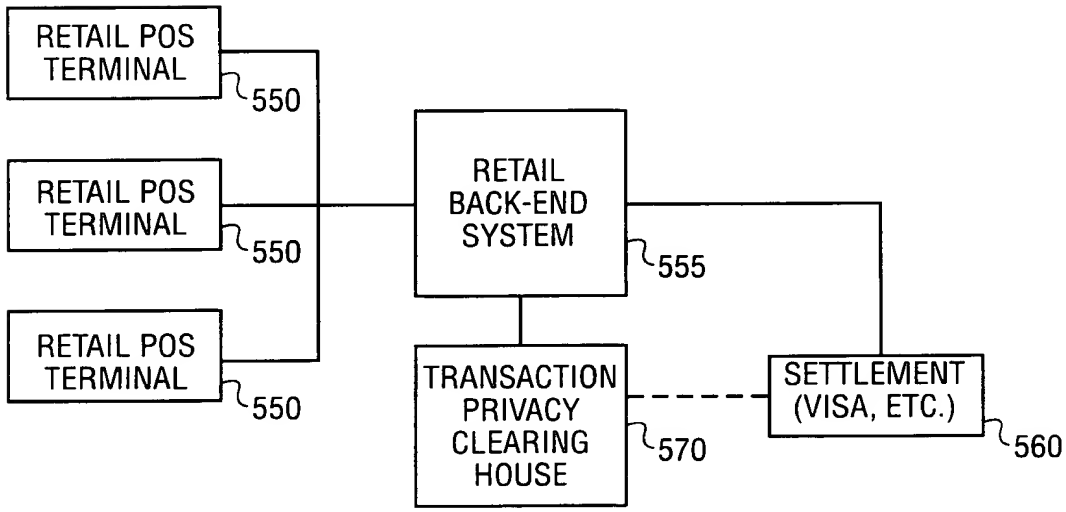


FIG. 4



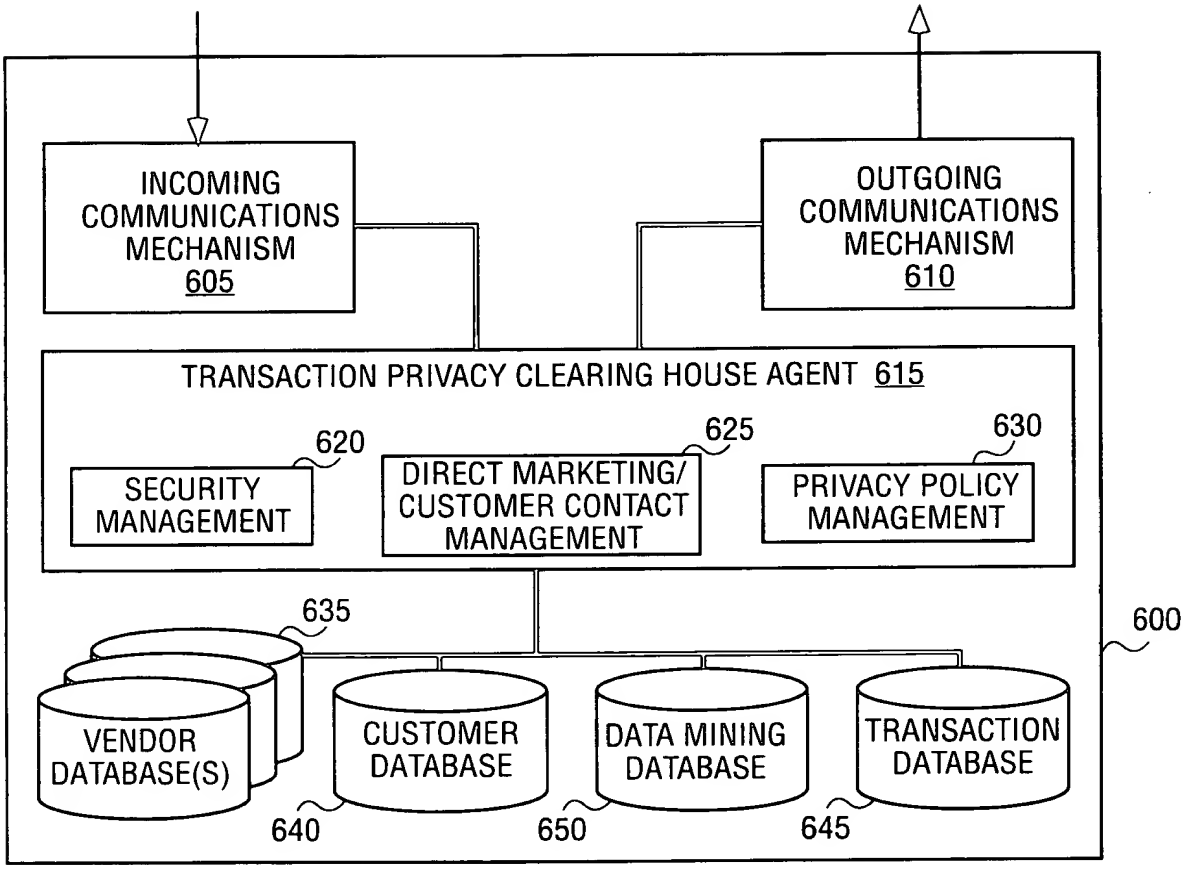
A RETAIL SYSTEM MODIFIED TO SUPPORT THE INTERACTION OF LEGACY POS TERMINAL WITH THE DIGITAL WALLET SYSTEM

FIG. 5A



AN ALTERNATIVE EMBODIMENT OF THE RETAIL SYSTEM MODIFIED TO SUPPORT THE INTERACTION OF LEGACY POS TERMINALS WITH THE DIGITAL WALLET SYSTEM

FIG. 5B



TRANSACTION PRIVACY CLEARING HOUSE: MAJOR COMPONENTS

FIG. 6

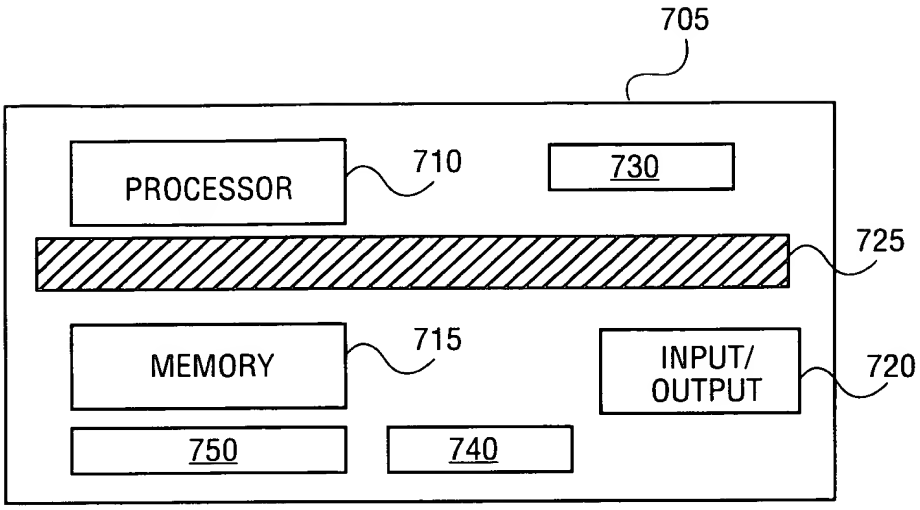

705
PROCESSOR
710
730
725
MEMORY
715
INPUT/
OUTPUT
720
750
740

FIG. 7A

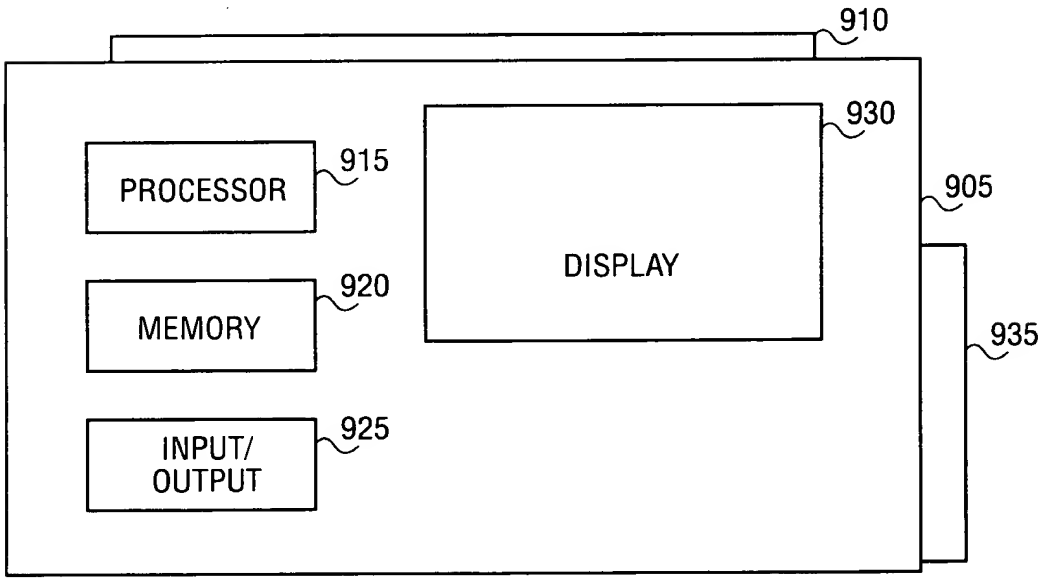

910
930
PROCESSOR
915
905
DISPLAY
MEMORY
920
935
INPUT/
OUTPUT
925

FIG. 9A

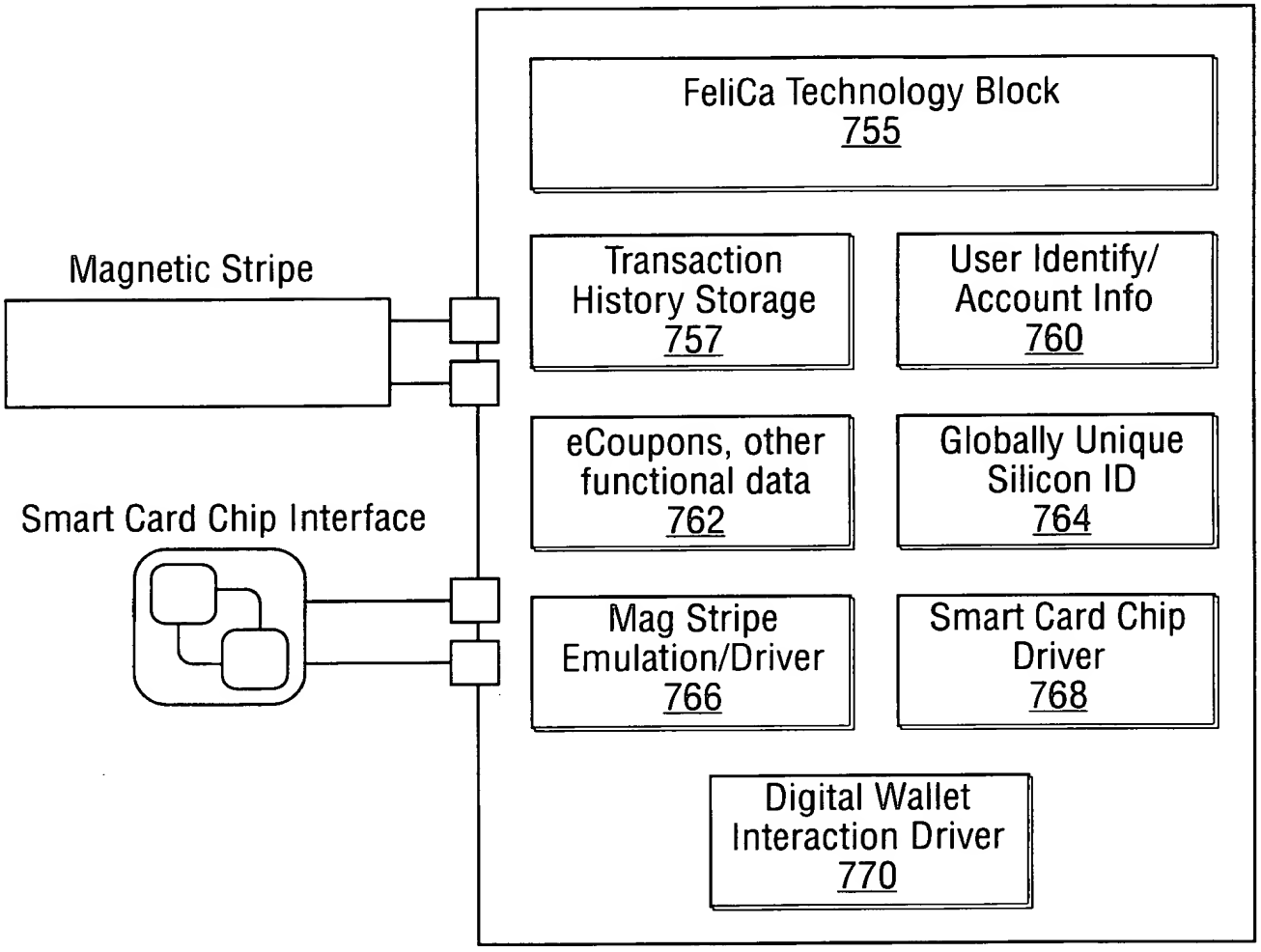

FeliCa Technology Block
755
Magnetic Stripe
Transaction History Storage
757
User Identify/ Account Info
760
eCoupons, other functional data
762
Globally Unique Silicon ID
764
Smart Card Chip Interface
Mag Stripe Emulation/Driver
766
Smart Card Chip Driver
768
Digital Wallet Interaction Driver
770

FIG. 7B

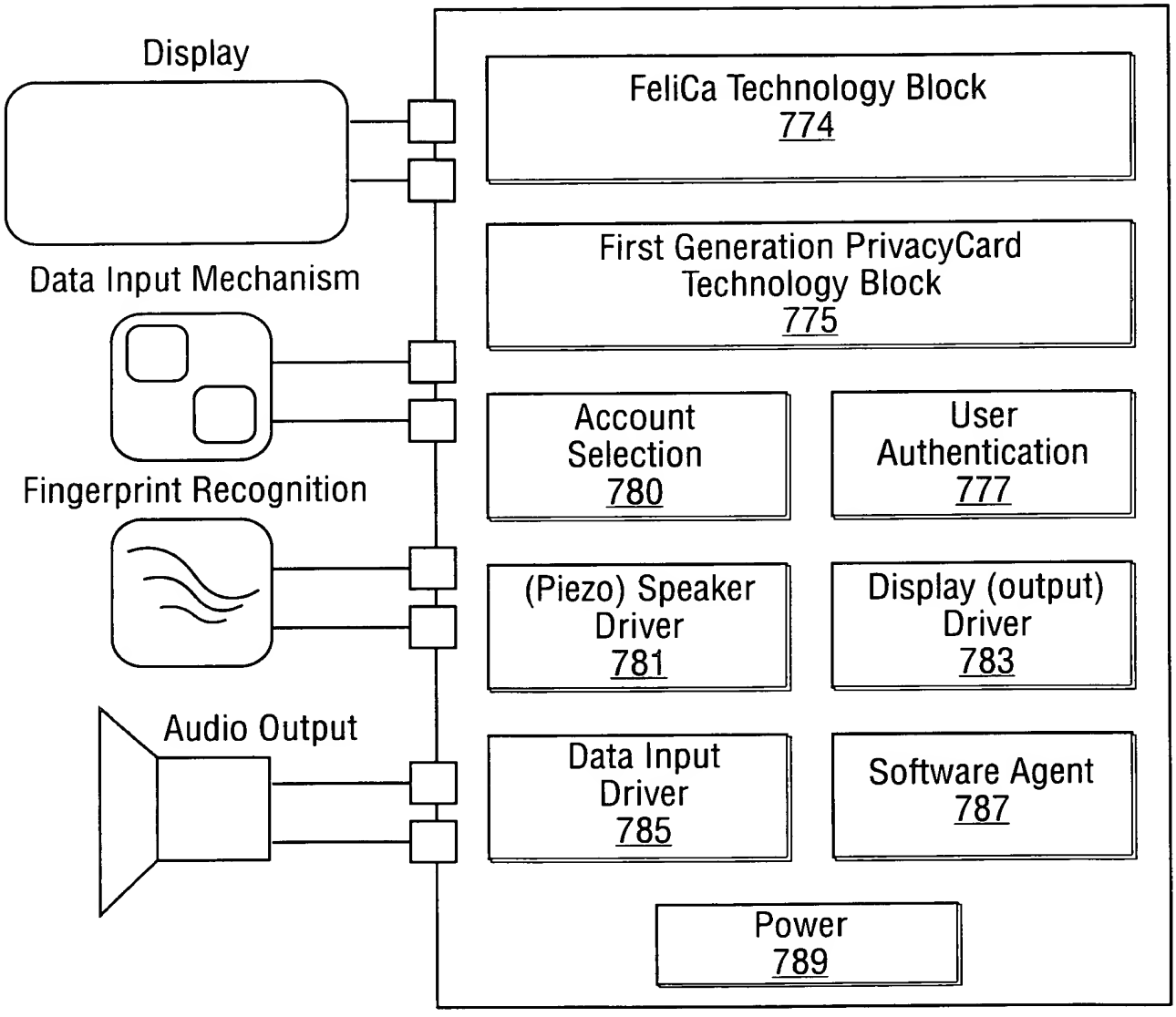
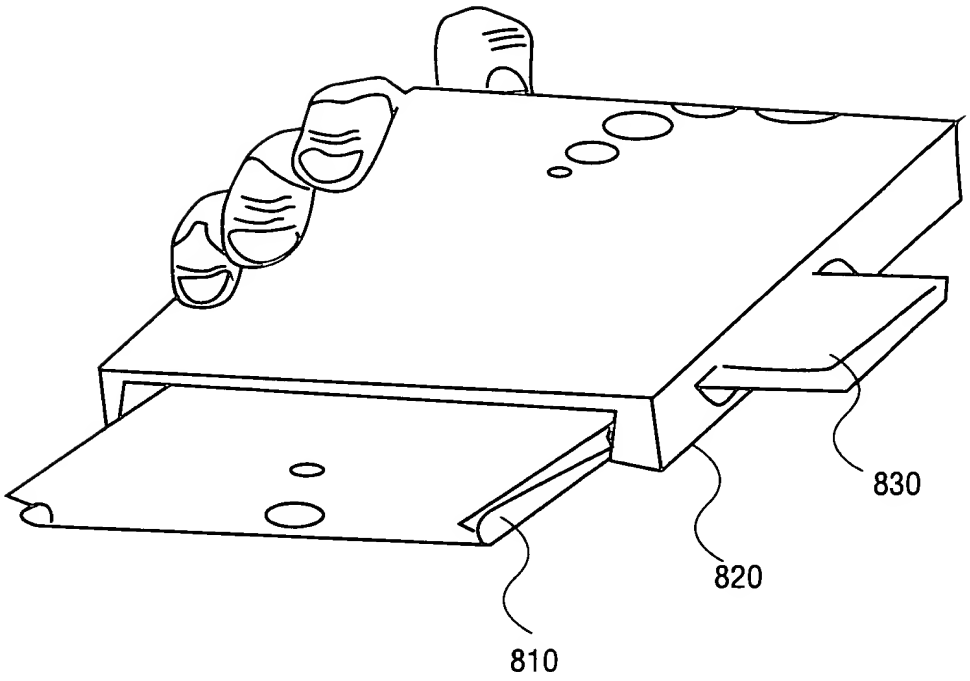

Display
Data Input Mechanism
Fingerprint Recognition
Audio Output
FeliCa Technology Block
774
First Generation PrivacyCard
Technology Block
775
Account
Selection
780
User
Authentication
777
(Piezo) Speaker
Driver
781
Display (output)
Driver
783
Data Input
Driver
785
Software Agent
787
Power
789

FIG. 7C

Docket No. 9656-0004



DIGITAL WALLET AND PRIVACY CARD

FIG. 8

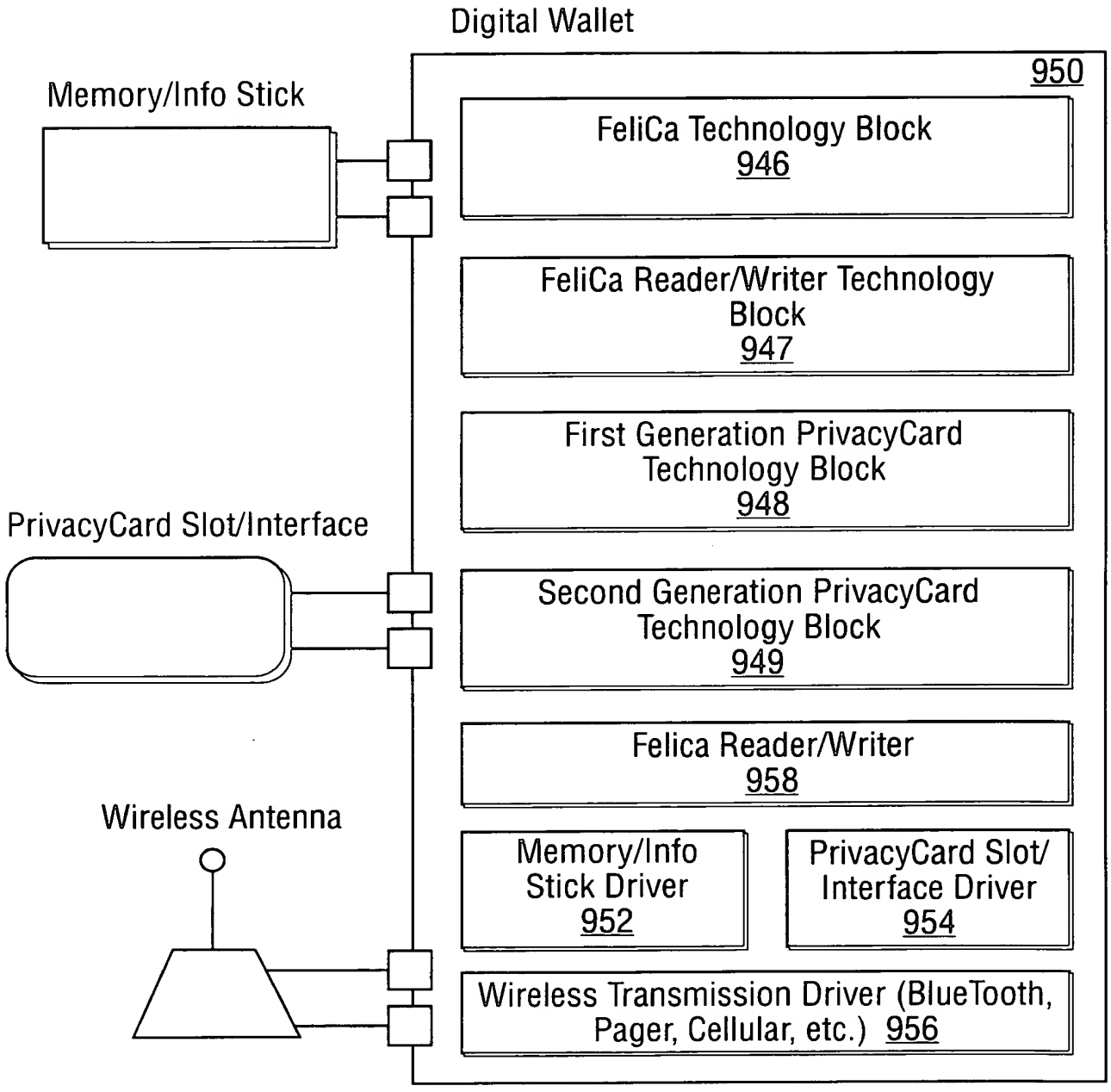
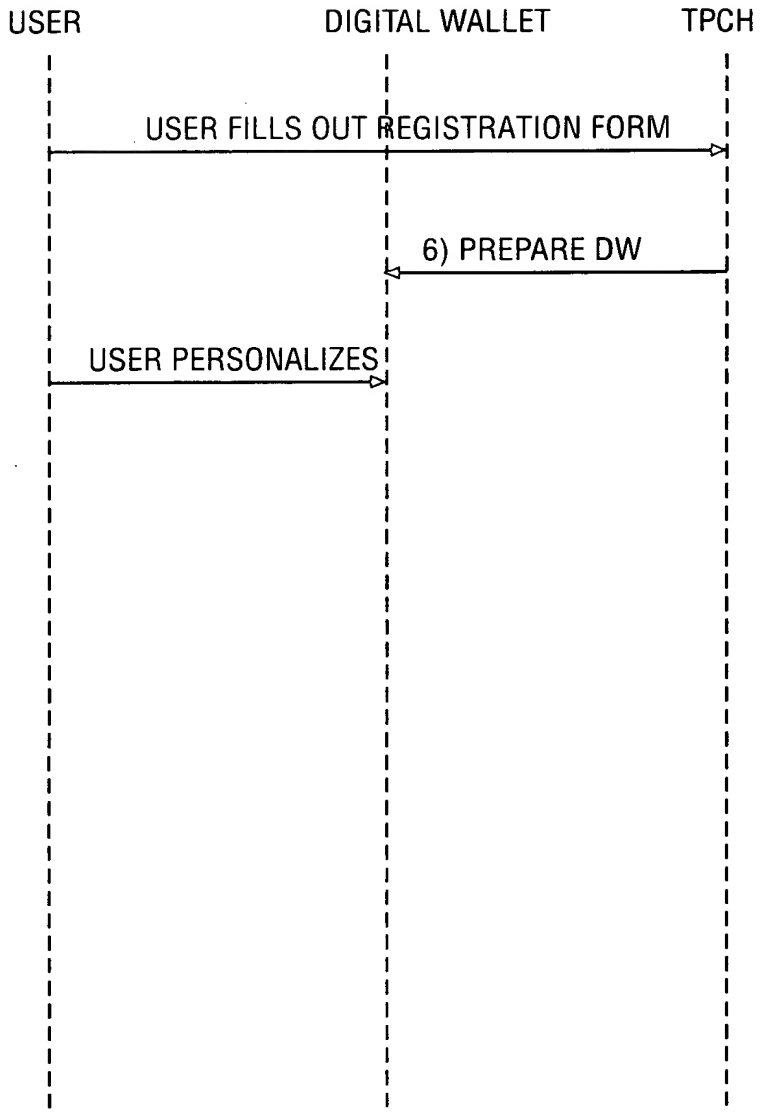

Digital Wallet
950
Memory/Info Stick
FeliCa Technology Block
946
FeliCa Reader/Writer Technology Block
947
First Generation PrivacyCard Technology Block
948
PrivacyCard Slot/Interface
Second Generation PrivacyCard Technology Block
949
Felica Reader/Writer
958
Wireless Antenna
Memory/Info Stick Driver
952
PrivacyCard Slot/ Interface Driver
954
Wireless Transmission Driver (BlueTooth, Pager, Cellular, etc.) 956

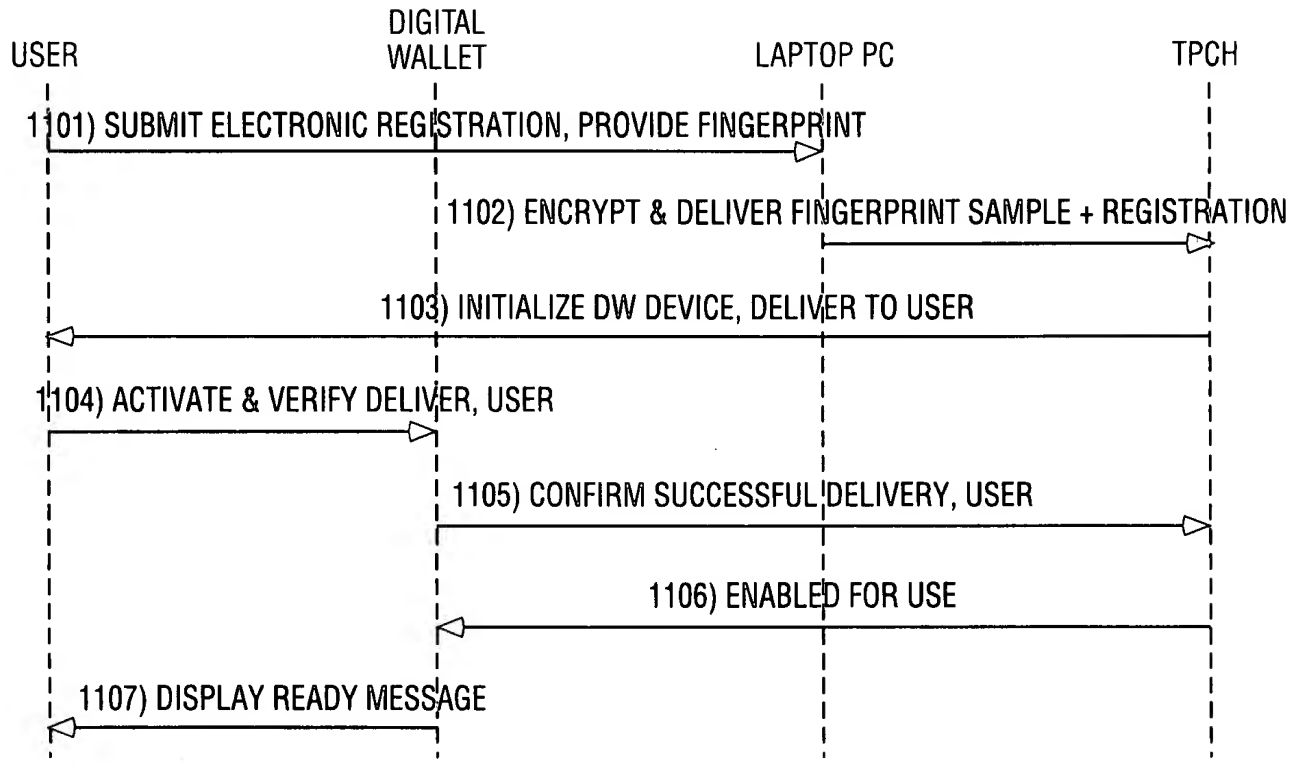
FIG. 9B



SETUP OF DIGITAL WALLET

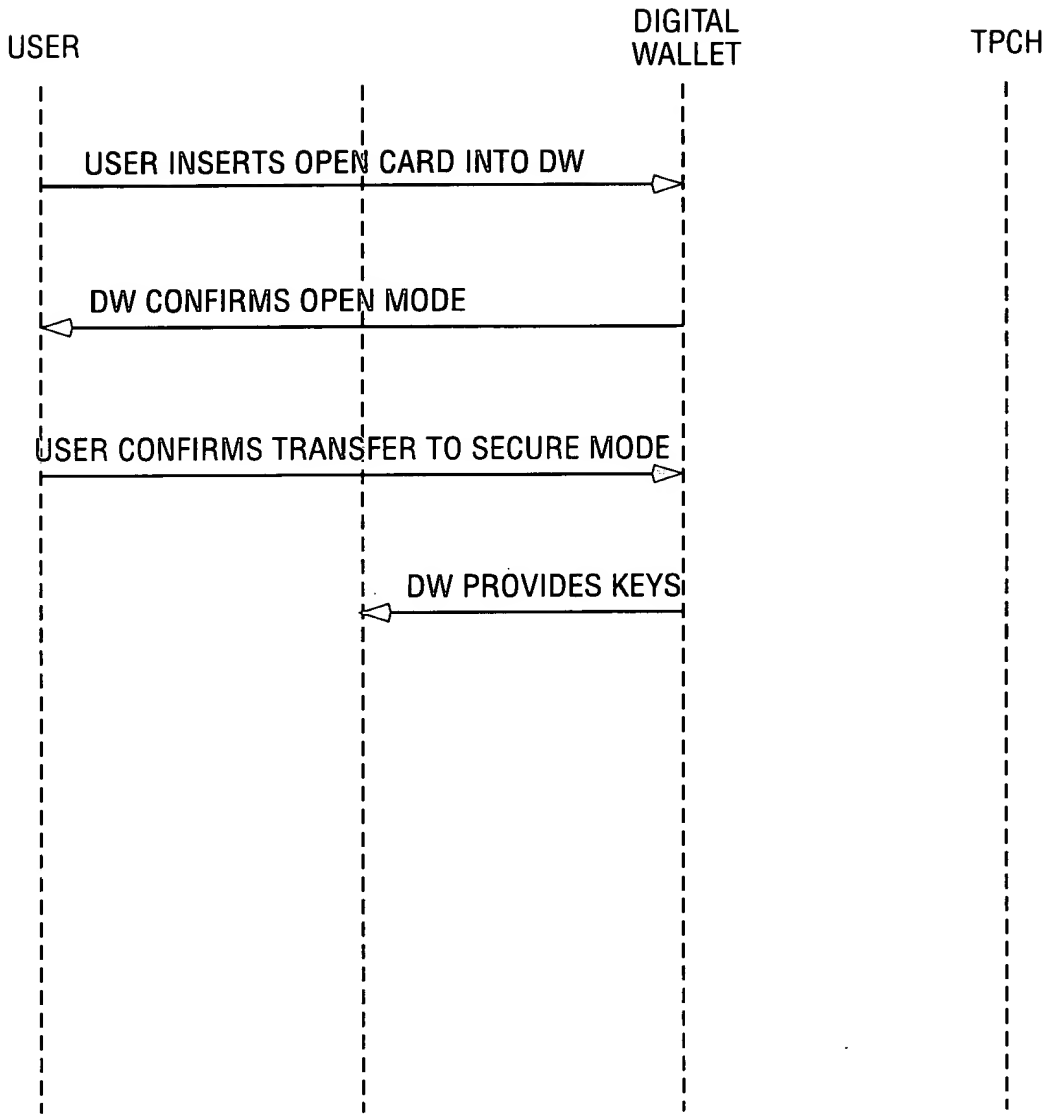
FIG. 10

TOE2hO"thBEE260



DIGITAL WALLET SETUP
(ALTERNATIVE EMBODIMENT)

FIG. 11



CONVERSION OF CARD TO SECURE

FIG. 12

TO2HO "HBEZ60

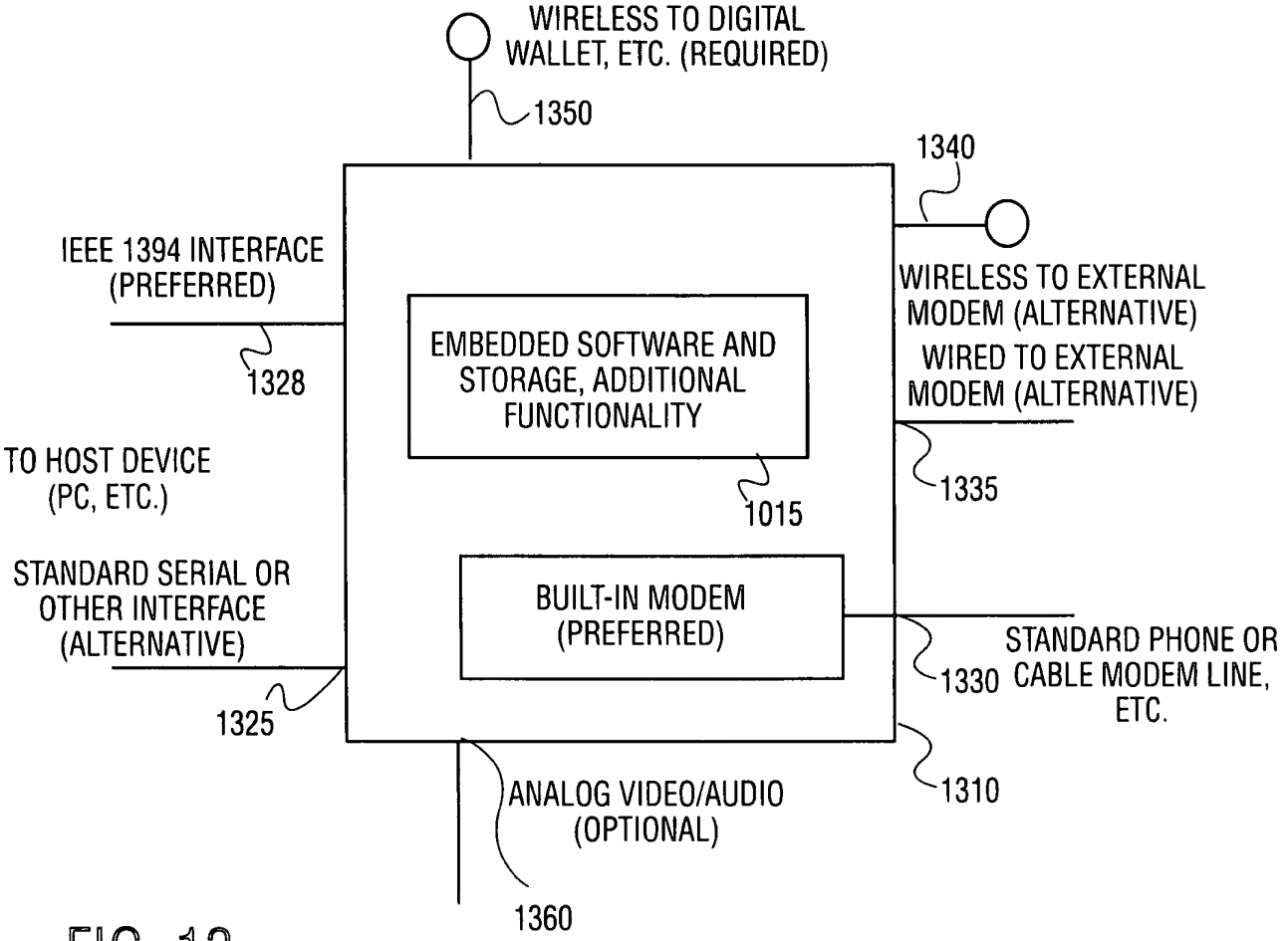


FIG. 13

TOE2hO" +h8EE60

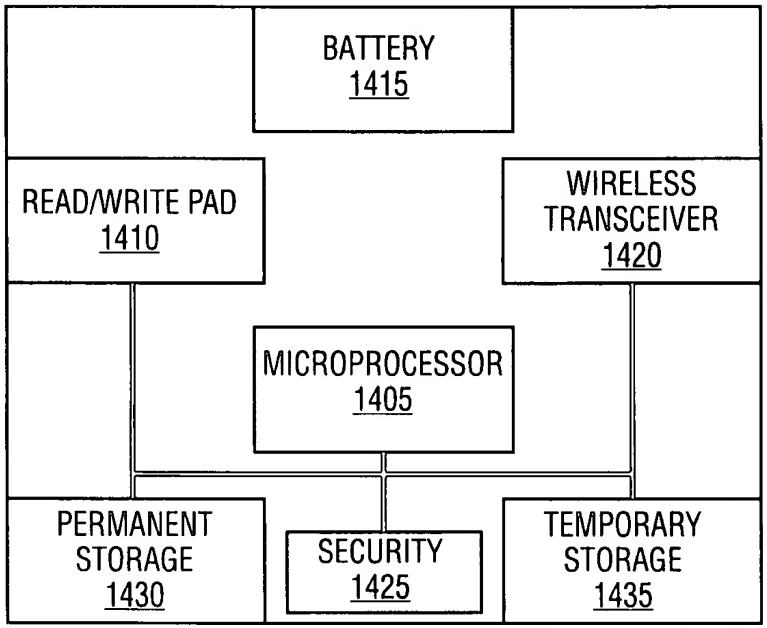


DIAGRAM OF THE MAJOR COMPONENTS OF THE PERSONAL POS, SHOWING THE DATA/ADDRESS BUS INTERCONNECT

FIG. 14

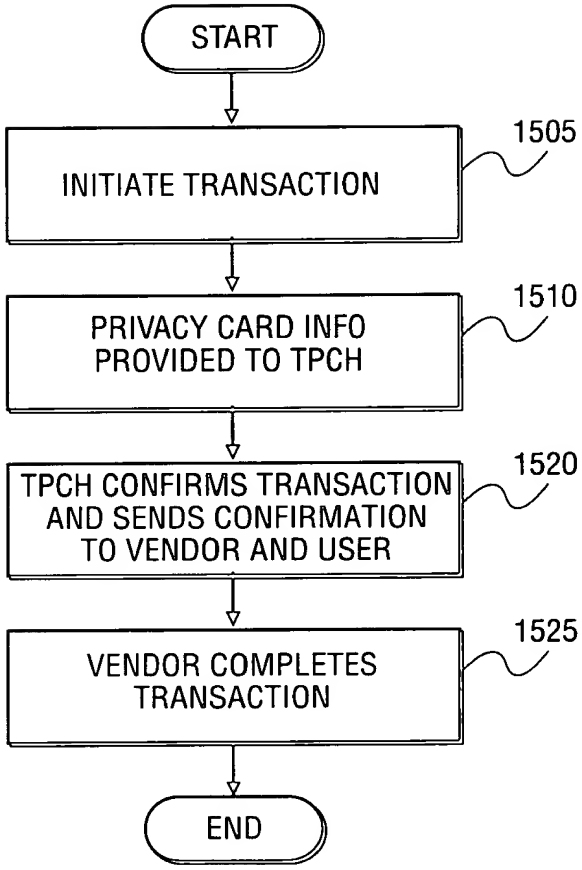

START
INITIATE TRANSACTION
1505
PRIVACY CARD INFO PROVIDED TO TPCH
1510
TPCH CONFIRMS TRANSACTION AND SENDS CONFIRMATION TO VENDOR AND USER
1520
VENDOR COMPLETES TRANSACTION
1525
END

FIG. 15

TOE2hO" hhBEE260

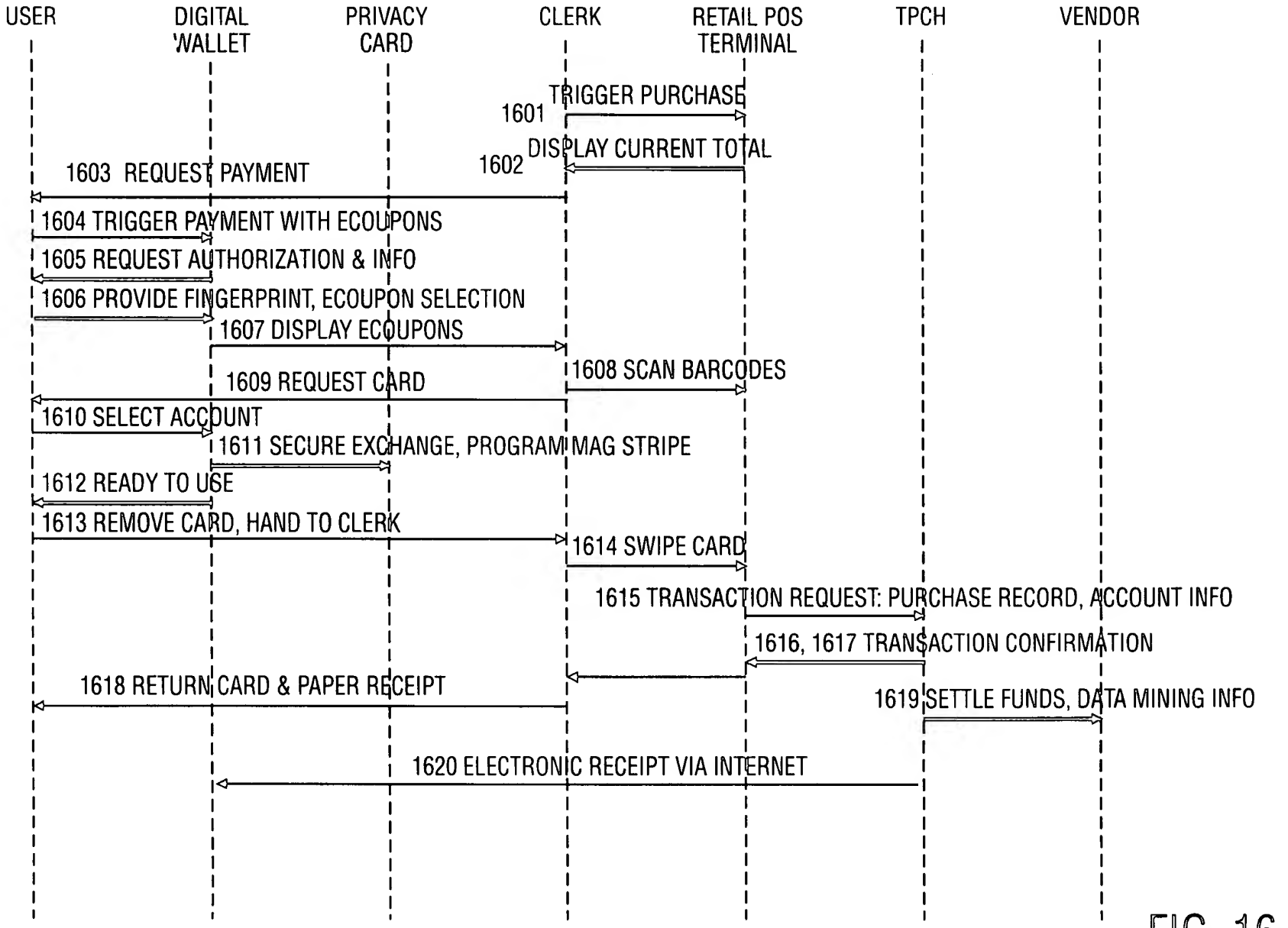


FIG. 16

RETAIL TRANSACTION

FOE2hO" hhBEE260

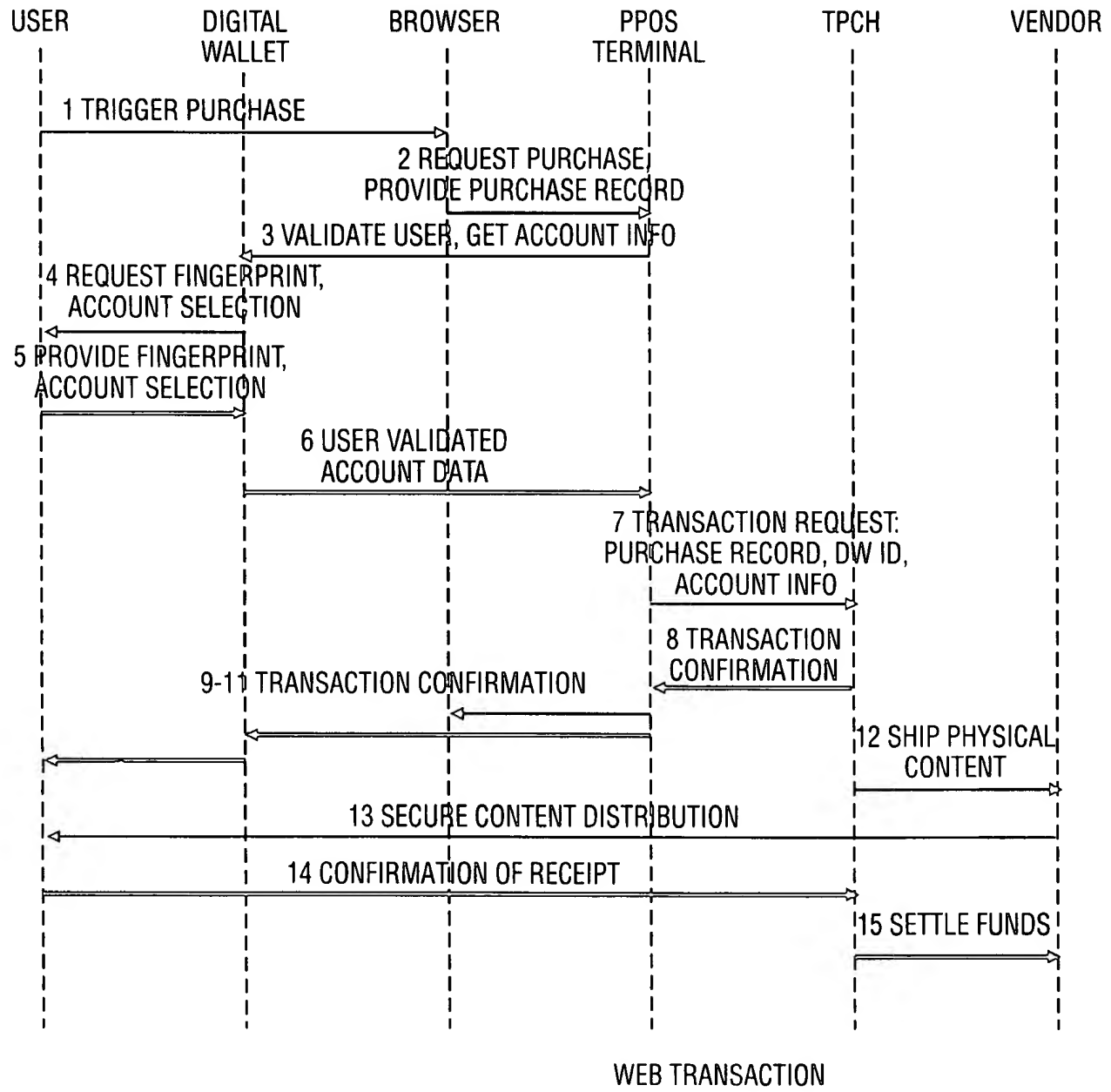


FIG. 17

FOE2nO" 1n3EE260

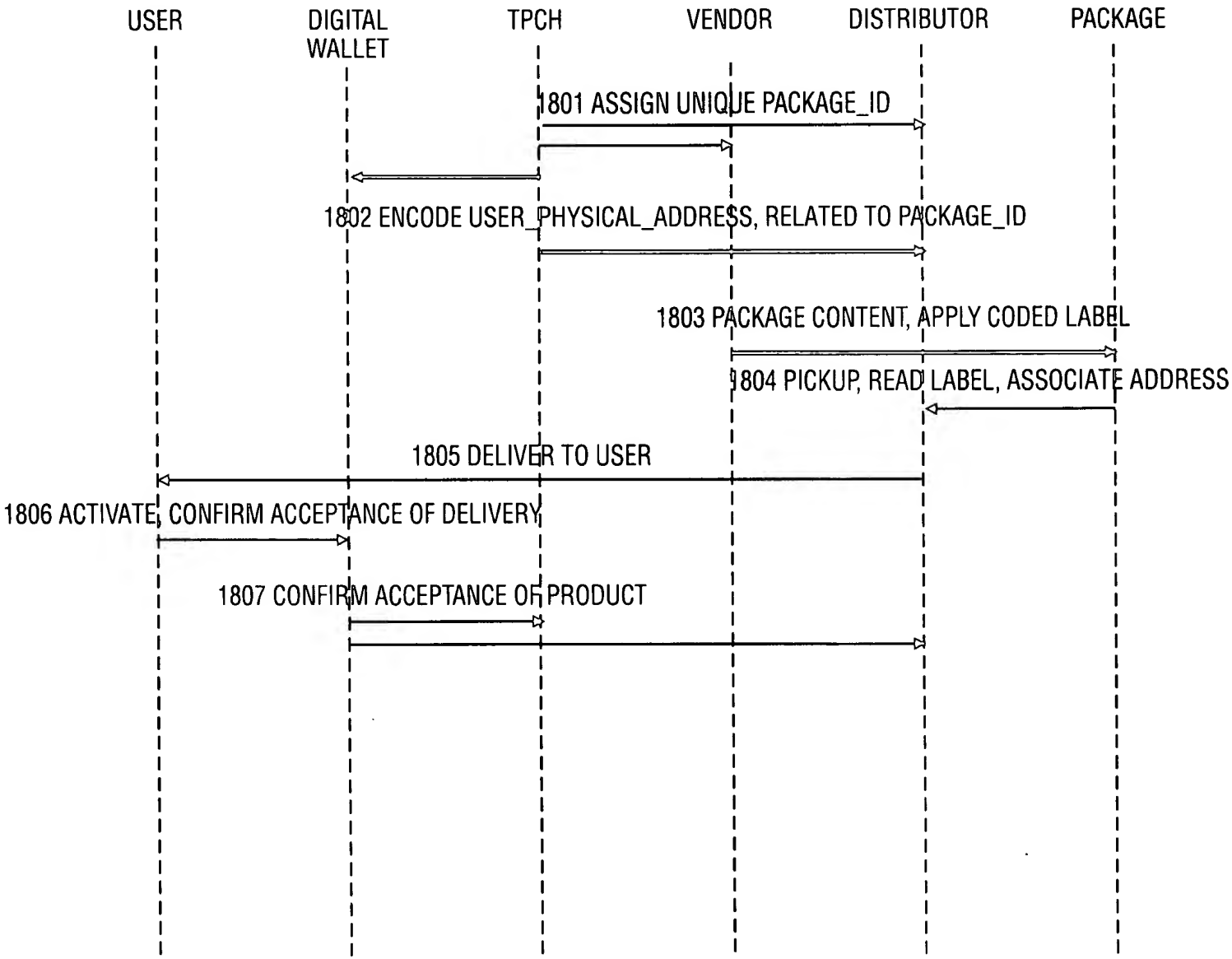


FIG. 18

TO52h0 "hBEE760

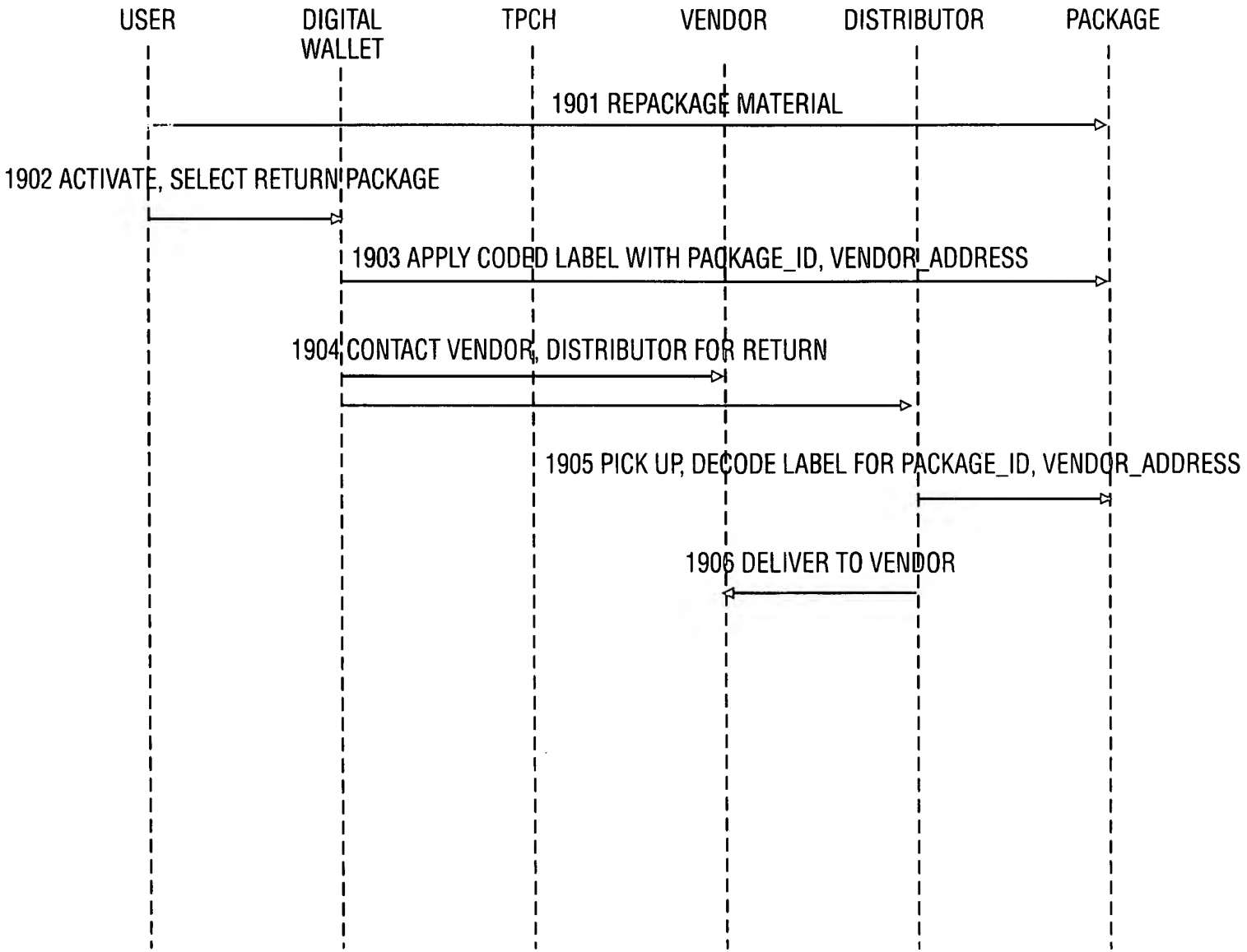


FIG. 19

FOE2h0" th8EE260

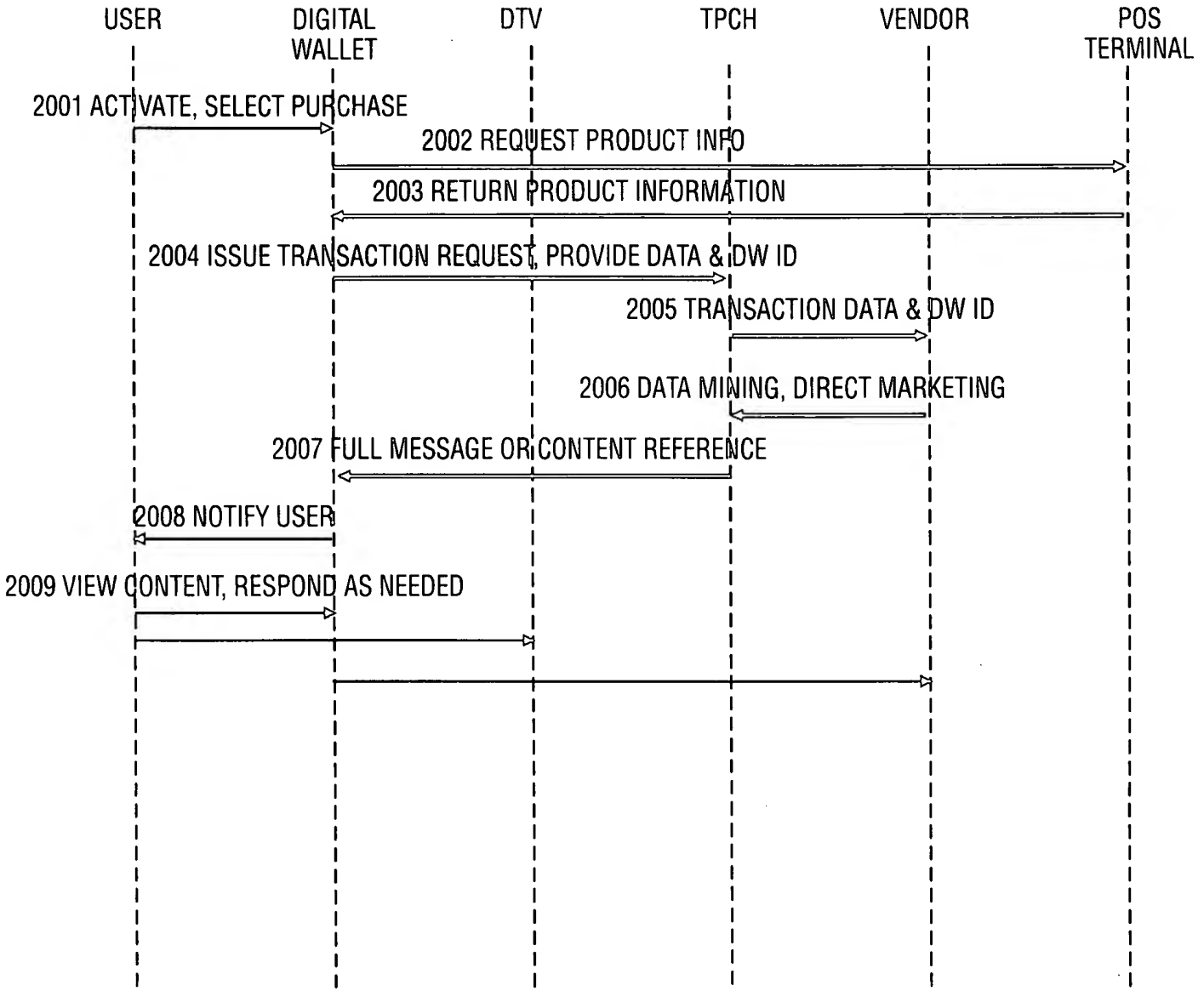


FIG. 20

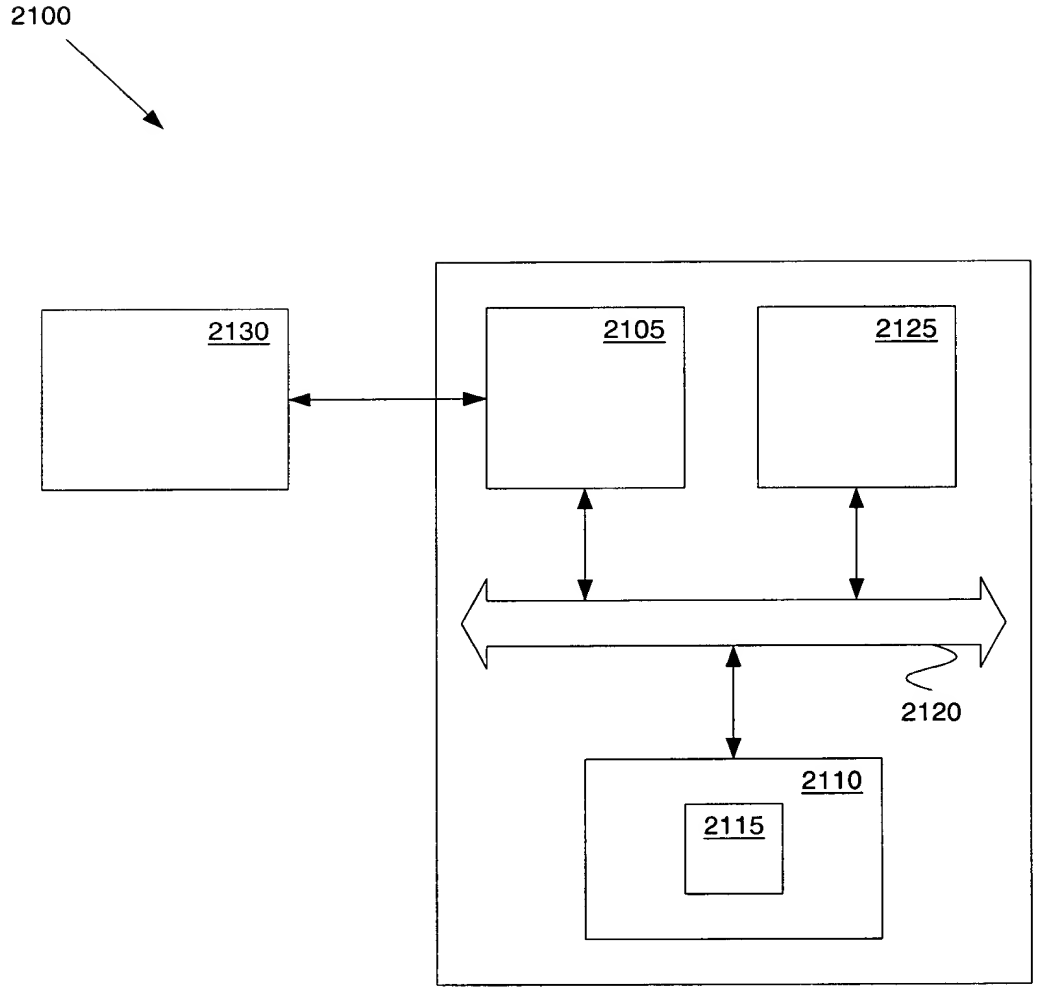


FIGURE 21

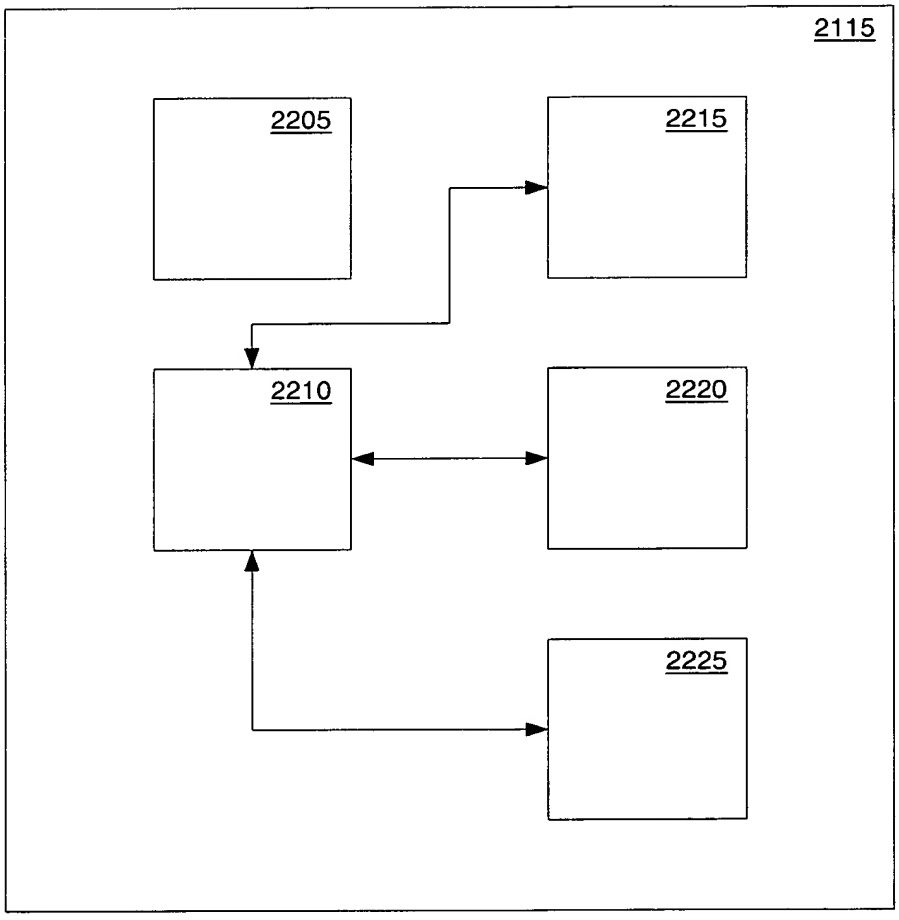


FIGURE 22

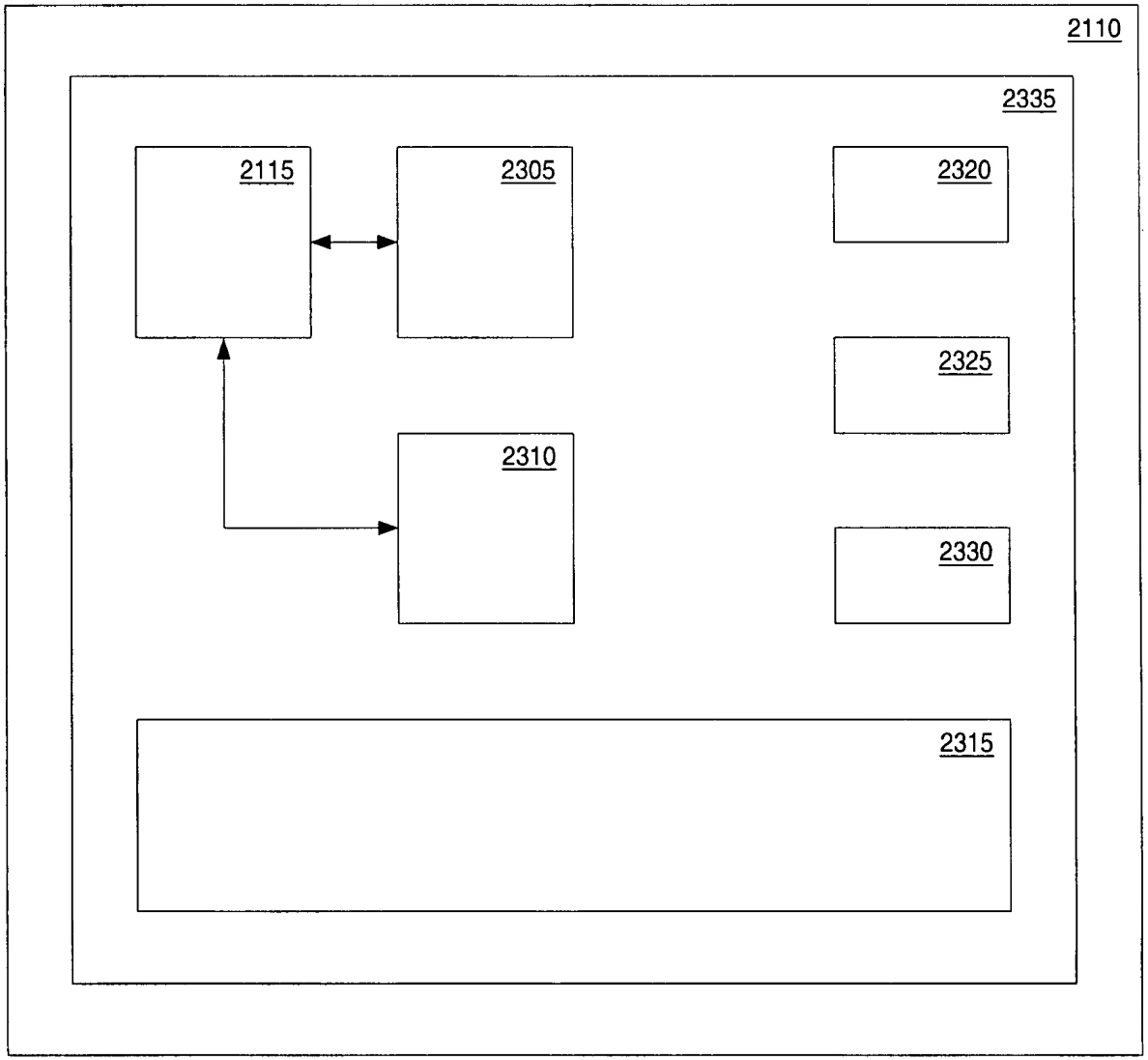


FIGURE 23

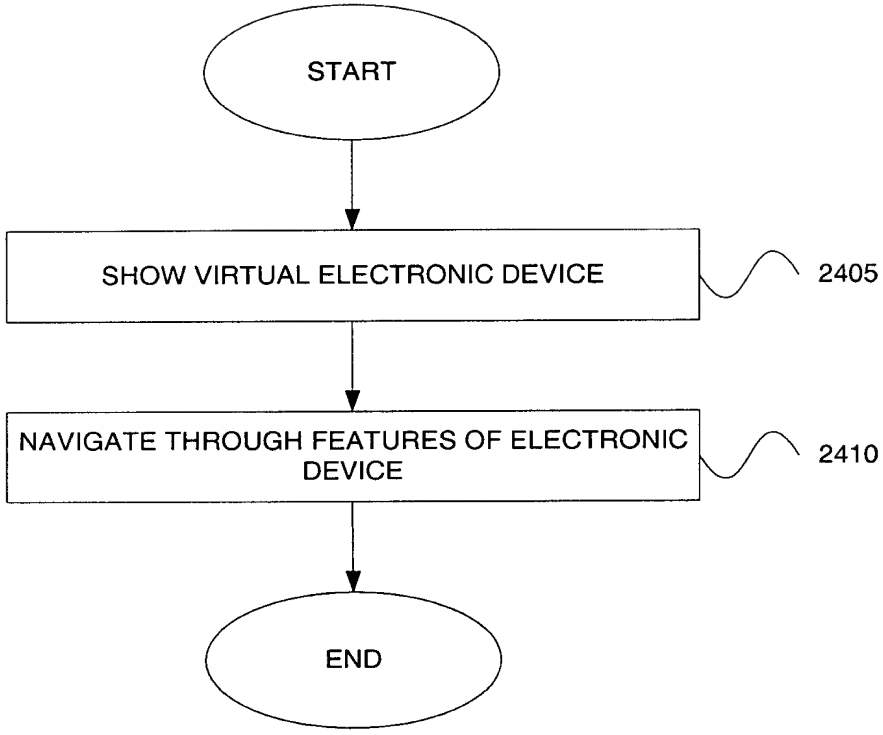

START
SHOW VIRTUAL ELECTRONIC DEVICE
2405
NAVIGATE THROUGH FEATURES OF ELECTRONIC DEVICE
2410
END

FIGURE 24

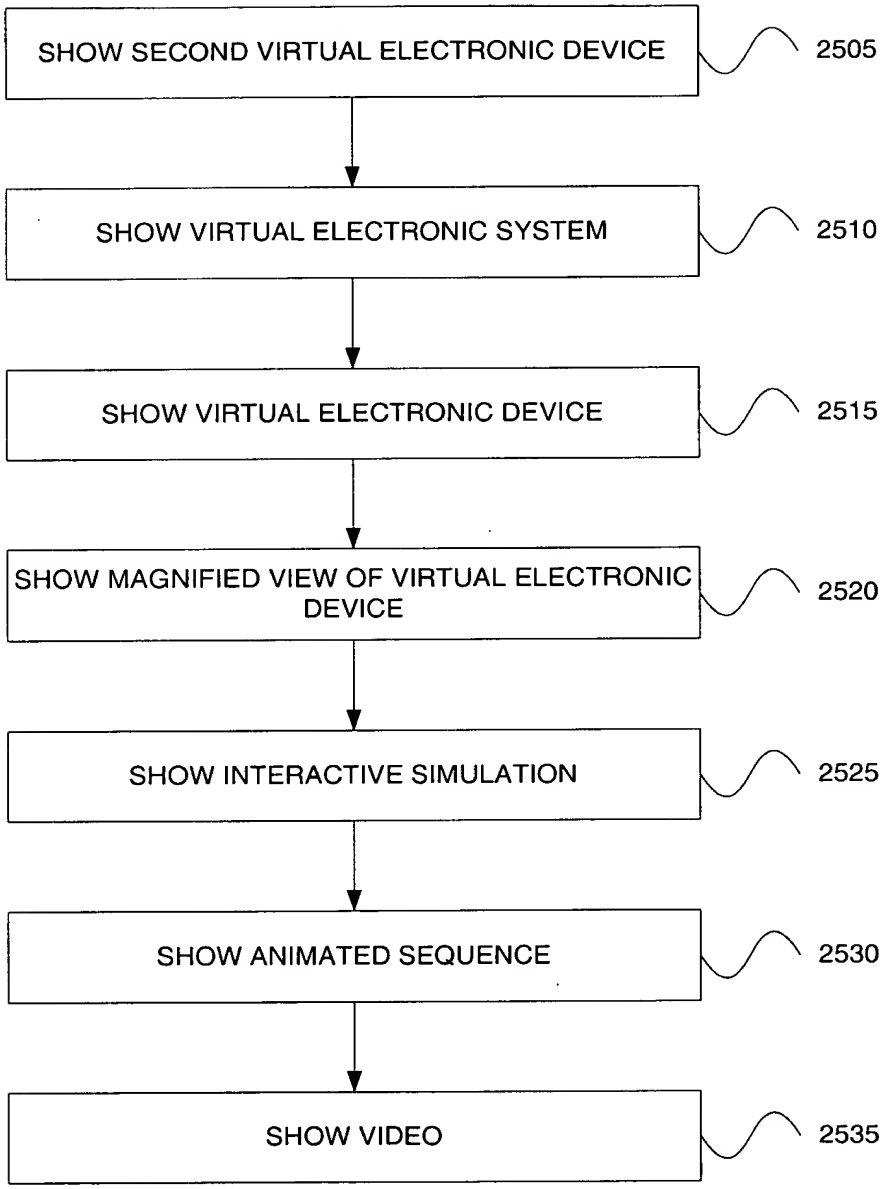

SHOW SECOND VIRTUAL ELECTRONIC DEVICE
2505
SHOW VIRTUAL ELECTRONIC SYSTEM
2510
SHOW VIRTUAL ELECTRONIC DEVICE
2515
SHOW MAGNIFIED VIEW OF VIRTUAL ELECTRONIC DEVICE
2520
SHOW INTERACTIVE SIMULATION
2525
SHOW ANIMATED SEQUENCE
2530
SHOW VIDEO
2535

FIGURE 25